1: Cooper E-4 (no date) 1946 SH5 Tehuelche SH5

323 **Pottery.**—The early *Tehuelche* used very simple and crude pottery (Pigafetta, 1906, 1:50), and pottery occurs archeologically far down the Atlantic coast and inland in *Tehuelche* territory (present volume, p. 20; Lothrop, 1932 b, pp. 194–196); but again there is no information on process of manufacture. Fitz-Roy (1839, 2:172) reported pottery absent from the *Tehuelche* of his day.

●281 325 **Miscellaneous.**—The *Tehuelche* did excellent lasso plaiting and saddlery work, and, after the early 19th century, very creditable silversmithing (Muñiz, 1917, p. 214; Bourne, 1853, p. 97, cf. 96).

281 [413] **Skin dressing.**—In dressing skins, the women first pegged them down to sun-dry them, then scraped them with flint, agate, obsidian, or glass scrapers. The scrapers (fig. 18, *g*) are hafted by lashing the blade to a bent split sapling (cf. illustr., Outes and Bruch, 1910, p. 121) or by setting it transversely in a block of wood. The skins were next [413] smeared with grease and liver, were kneaded into a pulp, and were softened by hand until quite pliable. A soft-grained stone was also used for scouring. In sewing, an eyeless needle or awl, later made of [283] an iron nail, and thread of guanaco or rhea sinew were used. (On *Tehuelche* skin dressing, cf.: Lothrop, 1929; Bourne, 1853, pp. 98–99; Guinnard, 1864, pp. 68–69; Roncagli, 1884, p. 778; Hatcher, 1903, p. 269. Our most detailed account is Kermes, 1893, pp. 209–210, for "*Pampa*" Indians apparently of Río Negro, probably including *Tehuelche;* he records dehairing with ashes.)

415 412 Skin bags were made for holding water (Coan, 1880, p. 53; Gardiner and Hunt, 1852, p. 89; Bourne, 1853, p. 82), paints, etc. Knives were earlier made of stone, and such were still used in the middle 18th century (Sánchez Labrador, 1936, p. 75). A small hand-adz was used in woodworking (fig. 18, *f;* cf. Musters, 1871, pp. 168, 170).

411 **Weapons.**—The chief hunting and fighting weapon of the early *Tehuelche* was the bow and arrow, which finally went out of use in the first half of the 19th century (Morrell, 1832, p. 84; Fitz-Roy, 1839, 2:149). The bows are described both as long and as short, with guanaco sinew string; arrows, with cane shafts, heads of stone or bone, and three feathers (Oviedo, 1851–55, 2:40), carried originally in the hair, fillet headdress, or belt instead of a quiver. D'Orbigny (1835–47, 2:116–117) reported bows 3 feet (90 cm.) long, some use of skin quivers, and slings. The bolas, of the one-, two-, and three-balled types (fig. 18, *i, j, k*), began to replace the bow and arrow at the time of the adoption of the horse. The lasso, too, was of later introduction.

The lance, bola perdida, European weapons, and armor are discussed below, pp. 153–154.

372 **Fire making.**—Ordinarily fire was made by the drill method. Fire making by percussion is recorded by two observers, Coan (1880, p. 50) with two pebbles and Spegazzini (1884, p. 232) with two flints—the former case possibly due to immigrant *Ona* influence (cf. supra).

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136 The Indians affirm that the puma will attack a single man alone and on foot, and, indeed, subsequently, an example of this came under my notice; however, if a person should be benighted or lost, he has only to take the precaution of lighting a fire, which these animals will never approach. They are most savage in the early part of the spring or breeding season, when, according to my experience, they are found roaming over the country in an unsettled manner; they are then also thinner than at other times, but, like the wild horse, they are generally pretty fat at all times of the year. The females I saw were sometimes accompanied by two cubs, but never more. The meat of the puma resembles pork, and [262] is good eating, though better boiled than roasted, but one or two Indians of my acquaintance would not touch the meat.

● 281 136 The hide is useful either for saddle-cloths or to make mantles of; and owing to its greasy nature it can be softened with less trouble than that of the guanaco. In Santa Cruz one of the men had a pair of trousers made of lion's skin, which worn with the hair side out was impervious to wet. From the hock and lower part of the hind legs boots may be constructed similar to those made from horse hide, and in common use amongst the Indians and also the gauchos of Plata. These, however, are only made from pumas of large size, and they wear out very quickly. To 224 kill a puma with a gun is rather a difficult matter, as, unless the ball enters his skull, or strikes near the region of the heart, he has as many lives as his relation the cat. I once put three revolver bullets into one, and ultimately had recourse to the bolas as a more effective weapon. When wounded they become very savage, but they are at all times bad customers for dogs, which they maul in a shocking manner. The Indian dogs are trained to stand off and bay them, keeping out of range of the claws; nevertheless they not unfrequently get killed. Perhaps the simplest way of taking the pumas, is to throw a lazo over them, as directly they feel the noose they lie down as if dead, and are easily des-

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then bound off, and speedily distance him. Their means of defence consist chiefly in the savate, or use of the feet, more especially the fore ones, although they also bite at times, and with their two peculiar canine teeth could inflict a severe wound.* I have seen places where a puma and a guanaco have evidently had a severe struggle, always, however, resulting in the victory of the puma, as, on seeing these marks, we invariably searched for and found the body near, carefully covered over by the 'leon.' The flesh of the guanaco is excellent, something resembling mutton; the young guanaco being more like very tender veal. That their wool might be turned to account for mercantile purposes is undoubted, as it is of very fine texture, and is at the present time of value in Chili, where it is woven into ponchos which are highly prized. Up to the present time few have been domesticated, but they become very tame, and might at a future date be found useful as beasts of burden, as they are similar in most respects to the lama. There is one very remarkable point about the guanaco; at certain times of the year a sort of secretion, condensed into a hard substance like stone, is found in round pieces, varying from a quarter to half an inch in diameter, in the stomach. To these stones some of the Indians attribute medicinal virtues. The guanaco is of use to the Indians in every way. The skin of the adult is used to make the coverings of the toldos, and that of the unborn or young ones to make mantles for clothes; the sinews of the back furnish them with thread; the skin of the neck, which is particularly tough and durable, with lazos or thongs for bolas, bridles, &c., &c. The skin of the hock supplies them with shoes or coverings for the bolas; from the thigh bone they also cut out dice, or make a musical instrument. On attaining the age of about two months, the coat of the young guanaco begins to become woolly, and the skin is then useless for mantles, but makes sufficiently good saddle-cloths.

* The skull of a guanaco is well figured in Mr. Cunningham's work.

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saddle-cloths. The animal at this early age is very swift of foot, and will give a good chase. They attain their full size the second or third year after birth, and the adult male cannot be better described than as apostrophized by Lieut. Gallegos. As we watched a solitary guanaco standing on a hill above us, and every now and then uttering its shrill warning neigh, 'Ah,' said Gallegos, 'you are a queer animal; you have the neigh of a horse, the wool of a sheep, the neck of a camel, the feet of a deer, and the swiftness of the devil.' The Rhea Darwinii, called by the Indians 'Mekyush,' and by the Spaniards Avestrus or Ostrich, which name is universally applied to it, is peculiar to Patagonia, few being met with north of Rio Negro, and none being found that I am aware of in any other part of the globe; with the exception, perhaps, of the more northern and plain-like parts of Tierra del Fuego, opposite the country extending from Cape Virgin to Ozzy Harbour. It is a variety of the Rhea Americana, common in the Argentine provinces of Entre Rios and Santa Fé, also scattered over the Republic of the Banda Oriental, and extending, I believe, as far north as Rio Grande do Sul and the southern Brazilian province. They exist also in Chili, on the plains at the foot of the Cordillera of the Andes. The chief difference between these two species is that the Patagonian Rhea Darwinii is smaller and of lighter colour than the American Rhea. The Patagonian ostriches are very swift of foot, and run with their wings closed, while the other species invariably spread theirs. The former birds also always run in a straight line, except when leaving the nest, when probably, to avoid being tracked, they run in a circuitous manner. Their plumage, that is to say the wing feathers, are an object of commerce, and fetch at present about a dollar a pound in Buenos Ayres. The marrow from the leg bones is also, I believe, of use for making pomade, and was formerly, if not at present, highly prized in Buenos Ayres. To the Indian this bird is invaluable in many ways. Besides furnishing their most favourite

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263 food, from the sinews of the leg things for holes are con-
[261] structed; the neck is used as a pouch for salt or tobacco;
the feathers are exchanged for tobacco and other necessaries;
the grease from the breast and back is tried out and secured
in bags formed of the skin (taken off during the spring
season, when the females, like all the Patagonian animals
except the puma, are thin); the meat is more nourishing
and more relished by the Indians than that of any other
animal in the country, and the eggs form a staple commodity
of food during the months of September, October, and
November. The male bird stands about two feet and a
[134] half high, and is to be distinguished from the female by
its being of a slightly darker colour, and of greater size and
strength; nevertheless, it requires a practised eye to detect
the difference at any distance. The male bird is also swifter.
Their usual food consists of short grass and the seeds of
various shrubs, but more especially of tender grass, which I
have on several occasions watched them plucking, from a
convenient rock which hid me from their sight. On being
alarmed they immediately set off at a great speed; they
possess great powers of eyesight. If met or obstructed by
horsemen in their line of flight, they not unfrequently squat
so closely that they can scarcely be distinguished from the
surrounding rocks, as the greyish colour of their plumage so
closely resembles the almost universal aspect of the Pampas
of Patagonia. These birds, though not web-footed, can
swim sufficiently well to pass a river. In the winter season
[228] it is not unfrequent for the Indians to drive them into the
water, where, their legs getting numbed with cold, they are
drifted to the shore by the current, and easily captured,
being unable to move. In snowy weather they are also
easily taken, as their eyes appear to be affected by the glare
of the white snow, and their saturated plumage doubtless
becomes heavier. They are polygamous, one male bird con-
sorting with five or six hens, which lay their eggs in the
same nest—a hole about two feet six inches in diameter,

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scooped out of the earth. They begin to lay in the early 136
part of September, the number of eggs in each nest varying from twenty to as many as forty, or more. In the early part of the laying season extraneous eggs were found scattered in different parts of the plain, some of which were of diminutive size. Contrary to the usual rule amongst birds, the male sits on the eggs, and when the chickens are hatched assumes the charge of the brood. The young run immediately, or shortly after emerging from the shell, and are covered with a down of greyish black colour on the back, and whitish on the breast and neck. Their cry resembles the syllables pi, pi, pi, uttered in a sharp quick manner. The old male, when any dangers appear, feigns to be hurt, like other birds endeavouring to distract the attention of the hunter, in order that his brood may escape by hiding in the grass. After the male has sat for some time on the nest (I should place the period of incubation at about three weeks), he gets thin, and the grass closely surrounding the nest is found eaten quite bare. The females by this time are beginning to pick up flesh, which is a fortunate provision of nature for the Indians, [262]
who cannot subsist on lean meat. Whilst the females are [281 439]
thin they are killed and skinned, the meat being left, and the skins sewn into mantles for sale at the settlements. These birds at that period are much afflicted with vermin, which invade the toldos and guanaco mantles of the Indians, and cause them infinite annoyance. (A useful hint occurs to me for future travellers amongst the Patagonians—never allow the squaw of the establishment to place ostrich mantles under your sleeping hides.) The young Rhea does not attain its full plumage or size until the second year after its birth, and is never pursued by the Indians unless food is really scarce. The eggs are eaten in all stages, fresh [262]
or stale; the Indians not recognising much difference between the unhatched chicken and the unborn guanaco. The inveterate destroyers of these birds are, besides their human enemies, the puma and foxes, the former of which will sur-

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started to hunt, but came back shortly almost empty-handed, fairly beaten by the driving sleet and snow. During our stay most of us had refitted all our gear, and were well provided with bolas; many were the necks of guanaco stripped to obtain the hide for them, and for making 'manêos' (straps for securing horses' legs), whips, cinctas (girths), lazos, &c., &c. The work that I preferred was plaiting ostrich sinews for thongs for the ostrich bolas. The ostrich sinews are abstracted by dislocating the lower joint of the leg, the first sinew is then pulled out by hand, and the other drawn out by main force, using the leg bone as a handle. This bone is then separated from the foot, and the sinews left adhering to the foot; they are slightly dried in the sun, after which the extracted bone is used to separate the fibres by drawing it sharply up the sinews. When sufficiently separated, they are cut off from the foot, split into equal sizes and lengths, and laid in a moist place to soften; when sufficiently soft, they are made into thongs, cooked brains being used to make them more pliable, and lie better in the plaits. These thongs are plaited in four plaits (round sinnet) well known to every sailor, but the ends are doubled in a peculiar manner, which requires practice to manage well. Before leaving Chiriq another disturbance was nearly taking place, caused by one of the Chilians quitting Tchang's toldo and joining that of a man commonly called Santa Cruz, an Indian well known at Patagones, and allowed a ration of mares from the Government. Tchang, immediately on hearing of his departure, put on his revolver and collared the Chilian's horse. To this Santa Cruz objected, but Tchang kept the horse, and, revolver in hand, defied anybody's claim to it. After this little incident the camp was broken up, and the two parties divided—Hinchel marching S.W. and our party to the N.W.

After a very cold and hungry march in the face of a bitterly piercing wind, we encamped on the shores of a lagoon of some extent, called 'Hoshelkaik,' which signifies 'Windy-

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started off; so, as my mantle was fast losing its beautiful appearance, I put compunction on one side, and shortly killed them with a blow on the head. On arriving at the fire where some of the Indians were collected eating ostriches, I was proceeding to take the skins off, when Tankelow, who presided, stopped me, saying that we would skin them in the toldos, where the blood would be a treat to the women and children. We accordingly reserved the luxury, and after a feed crossed a small stream and piece of marsh, beyond which lay the encampment, where the women soon verified Tankelow's words. Though the flesh of the young guanaco is rather tasteless and soft, the blood has a sweeter taste than that of the adult. The rennet, or milk, which is found curdled into a sort of cheese in the intestines, is also eaten with gusto. The most laborious part of young guanaco hunting consists in taking off the skin, which, after the necessary incisions have been made with a knife, has to be taken off by hand, the thumb being used to separate the hide from the body. The calves, when three days old, run at about the speed of a horse's hand-gallop, but sometimes give longer chases. The Indian plan is to kill them with a blow on the head from a ball, and then pass on to another, and so on, afterwards returning to collect them in a heap and skin them. After the hide is taken off it is necessary to expose it to the air for a few minutes before folding it up, otherwise it is liable to get heated, and will tear easily in the subsequent processes. We hunted in the neighbourhood of Jeroshaik, or 'Bad Hill,' several times, with varying success, sometimes proceeding up into the wooded hills, where the timber in some places grew in clumps, as if planted by the hand of man; in others filled up the rocky dells, until the main forests were reached, which appeared to extend far into the Cordillera. Most of the trees were of a species of beech, on which were many small edible fungi, some of which we gathered for use; and traces of red deer were frequently seen, and a few were chased by the Indians, but owing to the

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the next chapter—the Indians began to arrive, and the hunting was resumed; only, however, when absolutely necessary. Some of the new arrivals proceeded to the wild cattle district, and managed to kill a bull, although—as before—an accident occurred. As my lazo was used to capture the bull, I came in for a share of the meat, which was divided amongst the people in our toldo; but it proved very tough, and rather nasty. Perhaps the palate, having been so long accustomed to guanaco, ostrich, or horse, could not relish meat of a coarser description; but the hide was invaluable for making maneos and other horse-gear. On the 7th of January a messenger arrived from Casimiro requesting me to send him some information, and stating that he was distant some three marches, and wished to wait some time to refresh his horses, &c. After consulting with Orkeke and Jackechan, we sent back a messenger to say that, 'As game was scarce now in the vicinity of Teckel, and all were more or less desirous of pushing forward, he had better make haste and join us, otherwise we should continue our march towards Las Manzanas.' This message had the desired effect, as on the 11th he made his appearance, with several other toldos, a few only remaining in the rear with Crimè, who was reported to be unwell.

On Casimiro's arrival, as he now possessed a good toldo, I changed my quarters to his residence, as agreed on at the outset of the journey. I was sorry to leave Orkeke, and the old man was very much grieved, a present of a revolver only troubling him the more, as he informed me that he had nothing to offer in exchange; however, my assurance that I did not give him a present expecting an exchange, as is customary with Indians, appeared to console him. The usual consultation of the chiefs took place, in which all the preceding arrangements were agreed to, and we remained stationary in Teckel until January 20. As I had by this time become well acquainted with the mode of life and usages of the Tehuelches, and was looked upon as one of them-

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with a bodkin, and sewn to the hide with sinew. The anvils and hammers for working silver are generally stone implements; flints, however, are only used by the men for procuring fire. The Tehuelches are also very handy workers in iron, and will fashion a knife, or even an adze, out of any piece of metal procured by theft, commerce in the colonies, or from wrecks on the coast. One of the knives frequently used in the latter part of my journey was formed out of one blade of an old pair of scissors forged for me by Hinchel.

Their tools for working silver, iron, wood, &c., consist of files, known by the expressive name of 'Khikerikikh,' or perhaps a rasp, an occasional saw, an axe, the inevitable small adze (fig. 6), a pair of scissors, or an old chisel. Many of these have been obtained from shipwrecks on the coast, others by barter in the settlements.

The women's most important occupation in camp was the making up of skin mantles, which merits a full description.

The skins are first dried in the sun, being pegged down with thorns of the algarroba tree. When dry they are taken up, and scraped with pieces of flint, agate, obsidian, or sometimes glass, fixed into a branch naturally bent so as to form a handle (fig. 7). They are then smeared over with grease and liver kneaded into pulp, after which they are softened in the hand until quite pliable, when they are placed on the ground and cut with a small, very sharp knife into pieces, dovetailed so as to fit one into the other, in order to secure strength of seam, and parcelled out amongst a party of four or six women, with a corresponding quantity of needles and thread, consisting of bodkins formed out of sharpened nails, and dried sinews from the back of the adult guanaco. A whole mantle is never sewn together at once, but when one half is finished it is pegged out and the paint applied to it thus. The surface is slightly damped, and each woman takes a cake or piece of red ochre, if the ground is to be red, and, keeping it damp, lays the paint on with great care. When the ground is finished, the pattern of small black spots and blue

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294 and yellow lines is painted with the greatest exactness, the
531 women working all day with the most assiduous industry. When completed it is left for a night to dry, and the other half and wings, which serve in lieu of sleeves, are duly completed, and subsequently all are joined together, presenting, when finished, an unbroken surface of fur. The most favourite pattern (except when the wearer is in mourning) is a red ground with small black crosses and blue and yellow longitudinal lines for borders, or with a zigzag of white, blue, and red. The untiring energy with which the women work,
462 and the rapidity with which they sew, are astonishing. When a man is married, his wife, or wives, of course manufacture his mantles, assisted by their friends, whom they help in their turn; but should he be a bachelor, as in my unfortunate case,
[437] he gives out his skins to a fair lady, who works like other people I have heard of—on half-profits, and the hunter generally loses by the bargain; at least such was my experience, some thirty or forty skins only producing a mantle containing about one-third their number. Besides the guanaco
291 mantles which are most generally worn, others are made
437 from the skins of the fox, puma, wild cat, cavy, and skunk; the fur of the latter and of the wild cat are the most valuable, but, like the others, are generally intended only for barter.
462 The women, besides making mantles, weave the fillets for the
[294] head previously mentioned, from threads of unravelled stuff obtained in barter at the settlements, or from their Araucanian neighbours. They work on the same principle as
[286] that on which a sailor constructs a sword mat. Besides these fillets, they occasionally weave scarves for the waist, and garters. Many of them also work in the minor details of
[326] silver ornaments, such as hollowing out or bending the studs, boring the holes, and stitching them on to the belts or armour, as the case may be. They also sew the skins
[281] together for the coverings of the toldos, which is very laborious work. They scrape and dress horse-hides for the furniture of the bed-places, painting them in various pat-

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position as secretary and general referee next in rank to the cacique, scarcely reconciled me to the exchange of the orderly comfort of Mrs. Orkeke's household for the dignified discomfort of my present quarters. They were also shared by Meña, whose good qualities had raised him above his fellow-Chilians. Their number had been reduced to four, Arica having disappeared whilst hunting near Teckel: without doubt his quarrelsome disposition had occasioned his death at the hands of some one whom he had insulted or offended. The route followed led northwards through a valley on both sides of which we hunted, and arrived in the afternoon at an encampment called Carge-kaik, or Four Hills. There was nothing remarkable in the scenery: the hill-sides on either hand were covered with scrub, and the summits presented masses of rocks, and in some places loose boulders, amongst which numerous armadilloes were basking in the sun. They are easily captured, as they are very slow; but if they once get into their burrow it is difficult to extract them, owing to the tenacity with which they hold fast to the soil. They are very good eating, and are usually cooked in the shell on the fire, the entrails, &c., being taken out, and the cavity filled with heated stones. When they are in their best condition, one leg is sufficient for a man, as there is about an inch of yellow fat on them. Of the shells the women make work-baskets, to contain their bodkins, sinews, &c., when sewing, or to serve as colour-boxes for the different colours when painting.

The day following our arrival, Tankelow and another Indian were despatched as messengers to the party of Araucanian Indians, or Manzaneros, supposed to be encamped a few marches distant. During that night a child was born, the parents of which were rich, and accordingly a great slaughter of mares took place, the mandil tent was erected, and a feast and dance announced.

Meanwhile, about four P.M., the chasquis returned, bringing with them an Araucanian Indian, who was escorted to

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his mouth close to its chest and shouted to bring the devil out: he then turned it on its face and repeated the same process. The child's health mended next day, and it was shortly out of danger.

About ten o'clock at night Casimiro returned with his horses, which had strayed a considerable distance on the road back to Geylum. The next day a long march of twenty miles brought us to an encampment on the western verge of a broad plain, watered by a brooklet. During the hunt the first Patagonian hares, or cavies, were caught. These little animals live in burrows, but are generally out feeding or sleeping in the grass during the day. They are excessively swift for perhaps a mile, but, like the foxes of this country soon get tired. The chase of these small deer afforded an agreeable relief to the monotony of the journey. As soon as we entered a plain or valley where they abounded, as they always were found in numbers where the pasture was good, all hurried off to 'stop the earths,' *i.e.*, close up the burrows with bushes; but the cunning little beasts often evaded us by slipping into a burrow overlooked by the earth, stoppers. It required considerable skill to bring them down with the bolas, as, if only caught round the legs or body, they disentangled themselves quickly, but a blow on the head proved at once fatal. They are good eating, though the flesh is somewhat dry when roasted. Their skins are made up into mantles, but are of little value, as the hair soon comes off.

About a mile below the encampment, where the sandy plain narrowed and sloped down to a low-lying grassy valley, a singular phenomenon presented itself. The morning after our arrival, when going out to look for the horses, a furious easterly gale whirled the dust aloft in dense clouds, and, to my great surprise, the sand, which was driven into our faces, was as hot as when the fire so nearly encircled us. Almost blinded in forcing our way through this curtain of driving sand, we rode right into a hollow, where the earth appeared to be on fire; as the horses plunged

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of old pouches stuffed with guanaco wool, and sewn up with ostrich or guanaco sinews, a few lechos or woven blankets obtained from the Araucanos, and the remaining saddle gear. The cooking utensils comprise only an occasional iron pot, and an asador or spit; wooden platters are occasionally met with. The weapons used in the chase are the bolas, fitted with either two or three balls, the first being used against ostrich, and the latter to capture guanaco; and a lazo for capturing wild horses or cattle.

The arms of the Tehuelches consist of gun, or revolver, a long heavy lance, used only by dismounted Indians, and the bola perdeda, or single ball, a most effective weapon in their hands. Pigafetta mentions these Indians as using bows and arrows; this I look upon as an error: he either met with a party of Fuegians, or else with a tribe of Pampas living on the sea-coast, further north, whom I shall shortly have occasion to notice. My reason for stating that he was wrong is simply that no flint arrowheads are met with until the Rio Negro is reached, where they abound. Also there is but little wood nearer than the Cordillera suitable for bows, and it is reasonable to suppose that previous to the introduction of horses, these Indians' journeys were confined to a smaller area. Indeed, one Indian informed me that some caves, existing in a volcanic range south of the Santa Cruz river, were formerly inhabited by Tehuelches. When not engaged in hunting or training their horses, men occupy themselves in making wooden saddles, bolas, lazos, spurs, and other gear, or in working silver ornaments and pipes made out of stone or hard wood, and fitted usually with a silver tube; they also manufacture iron, procured by trade or from shipwrecks, into rings, knives, etc.

Their anvils and hammers for working the silver are generally of stone. They also shape the materials for bolas with hard stones; the scrapers with which the women clean the skins are of flint or obsidian, of which material, probably, prior to the advent of the Spaniards, their knives were constructed. They procure fire by the use of flint and steel, employing as tinder a description of dried fungus, obtained in the wooded districts at the base of the Cordillera. The women's occupations, besides discharging all the household duties and fetching wood and water, consist in dressing the skins and manufacturing the mantles of the young guanaco, fox, skunk, and ostrich skins, using, instead of needles and thread, sharp metal bodkins and sinews obtained from the back of the adult guanaco. The puma, fox, and ostrich mantles, are chiefly manufactured for barter in the settlements. Some of the women also weave garters and fillets for the head, and occasionally work in silver. The children amuse themselves, as usual, by imitating their elders. The boys practise with miniature bolas and lazos, and mount any

4: Lothrop A-4 (no date) 1929
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386 scum of boiled marrow-bones, and he states that red paint was ocher, black paint an earth, and white paint a gypsum. Bourne [18] says that black was obtained from charcoal, as was the practice among both Foot and Canoe Indians in Tierra del Fuego. No information is available about yellow, blue, and green pigments. We suspect that the green is always of European origin and has replaced blue, frequently mentioned by early travelers but not found on the Museum's specimens, which, by the way, illustrate the use of both native and
413 European pigments. On the methods of applying paints, we have the statement of Bourne that a stick was used for a brush. The Tehuelche made small hair-brushes by binding together a bundle of slender roots,[19] but apparently never used paint brushes. However, it must be remembered that a stick makes a good brush if the pulp has been removed by chewing so that a fibrous end remains.[19a] Certainly Tehuelche patterns have been applied with a neatness and precision perhaps not fully appreciable on existing specimens because the colors have run in the rain.[20]

●281 Assemblage of skins we illustrate in fig. 6. This mantle contains
291 twelve skins, placed alternately head to foot, as will be seen if the picture is reversed. From side to side there are five complete rows, two head-up and three head-down, while the sides contain skins which have been split into halves longitudinally. The result of thus piecing together the skins is an alternation of color, the white bellies and the *café au lait* backs of the guanaco succeeding each other in turn. Such robes have considerable commercial value today, and we have been told that more than half a million guanaco-skins were shipped from Patagonia in 1924.

531 Coming now to an examination of the painted patterns, preliminary
291 inspection shows that the decorated surface habitually is divided into

[18] Ubi supra.

[19] One of these is illustrated by Outes and Bruch, fig. 118.

[19a] See Orchard, W. C., Fine-line Decoration of Southwestern Pottery, *Indian Notes*, vol. II, no. 1, 1925.

[20] The colors in pls. LXV and LXVI have been made more intense than on the weather-stained original specimens. The following color-scheme is employed in our line-drawings.

Red Yellow Green Blue Black

5: Bourne T-5 (1849)1874
SH5 Tehuelche SH5

itory a brass tinder-box, with a stone and a piece of steel, and soon produced a blaze that brilliantly illuminated the scene. By its light I was enabled to survey the first specimen of Patagonian architecture that had blessed my vision. It was constructed in a *pointed* style, though not very aspiring, consisting of a row of stakes about eight feet high, each terminating at top in a crotch, or fork, with a pole laid across them; two parallel rows of stakes on either side, about two feet high, with similar terminations, and a similar horizontal fixture; and a covering composed of skins of the guanaco, sewed together with the sinews of the ostrich, the only thread used by the people. This covering is drawn over the frame-work, and fastened by stakes driven through it into the ground. For purposes of ventilation some interstices are left, but these again are half closed by skins attached to the outside; so that the air from without, and the smoke from within (in default of a chimney), must insinuate themselves through these apertures in great moderation. In truth, my first survey was rather hurried; the first cheerful gleam had scarcely set my eyes on the look-out when I was fain to shut them against an intolerable smoke. In no long time I felt as bacon, if conscious, might be supposed to feel in the process of curing. No lapse of time was sufficient to reconcile my eyes, nostrils and lungs, to the nuisance; often have I been more than half strangled by it, and compelled to lie with my face to the ground, as the only endurable position. Talk that is "worse than a smoky house" must be something out of date, or Shakspeare's imagination never comprehended anything so detestable as a Patagonian hut. The chief and his numer-

5: Bourne T-5 (1849) 1874
SH5 Tehuelche SH5

is found in considerable numbers. It is larger than the red deer, fleet on the foot, usually found in large herds, frequenting not only the plains, but found along the course of the Andes. Its flesh is a principal article of food; its skin is dried with the hair on, in such a manner that, when wet, it retains its pliability and softness. This process of preserving skins seems to be peculiar to the Indian tribes, and is not unlike that by which buffalo-robes, bear-skins, buckskins, and other articles of luxury, and even necessity, among us, are prepared by the North American Indians. Guanaco-skins are cut into pieces of all sizes, and sewed into a thousand fanciful patterns, every workman originating a style to suit himself. The hoofs are sometimes turned to account by the natives as soles for shoes, when they indulge in such a luxury, which is not often.

The enemy of the guanaco is the cougar, or "American lion," smaller than its African namesake, and more resembling the tiger in his character and habits, having a smooth, sleek coat, of a brownish yellow color,—altogether a very beautiful but ferocious creature. His chase is a favorite, though rare and dangerous, sport of the natives. Patagonia likewise boasts of the skunk, whose flesh is used for food. There are also foxes, and innumerable mice. Of birds, the only noticeable varieties are the condor, in the Andes, and the cassowary, a species of ostrich, smaller than that of Africa, on the plains; its plumage is not abundant, generally of a gray or dun color. Its flesh is tender and sweet, and with the fat much prized by the Indians. Like the African ostrich, it is exceedingly swift, only to be captured on horseback, and often fleet enough to outrun the fastest racer.

5: Bourne T-5 (1849) 1874
SH5 Tehuelche SH5

481 years old, would be a prodigy among them, — a miracle of genius.

291 294 An opportunity was afforded, while in camp, to see some specimens of their tailoring or mantua-making achievements; — either term is appropriate, as the male and female dress do not differ in form, and but slightly in the mode of adjustment. The mantle or blanket is worn around the shoulders; those of the women are fastened together by the corners under the chin with a stick for a pin; the men hold theirs around them with their hands, except that when hunting they tie a string around the waist.

281 294 The skins of young guanacos are selected for mantles, on account of the superior fineness and softness of the hair. Nearly a dozen skins are used for a single mantle, as a large part of each is esteemed unfit for use, and thrown away. The skins, while green, are stretched to their utmost tension on the ground to dry. When partially dried, they are scraped on the inside with a stone sharpened like a gun-flint, sprinkled the while with water, to facilitate the operation. When the surface is made tolerably smooth, and of a pretty uniform thickness, it is actively scoured with a coarse-grained stone, till it has a bright polish. The skin is again dried, then crumpled and twisted in the hands till it becomes perfectly soft and pliable. The

283 294 thread, as has been stated, is made from the sinews of the ostrich. These are extracted by the exertion of great strength, and divided into strings about the size of ordinary shoe-thread. They are then twisted, the ends are scraped to a point, and when dry become stiff; they are now ready for use.

4/62 woman be sick, for she must somehow find the strength to do all this.
[342 In addition to these things she must sew the tent together, it being made
●281] always of the skins of full grown guanacos, and all the other skins which
go to make bedding and clothing, these usually being made of hare,
skunk or newly born or unborn guanacos. These small guanacos are col-
lected and skinned in the springtime, and those in excess of the local
need are bartered with the Indians of Rio Negro for horses, clothing,
beaded halters and knives, which the latter acquire by trading or on their
4/38 periodic invasions of the Buenos Aires frontier. The fact is that the
Indians whom we are here describing have never had dealings with Spaniards
until the present date, nor have they seen any Spanish towns, nor do these
regions contain iron, metal, brass, tools or arms - all these things must
be acquired by the above mentioned trading. The women, in order to
[281 sew the skins together use awls which they make from the iron the Rio
283] Negro Indians give them, and instead of thread they use nerves which
they collect, as needed, from the legs of ostriches.

622 The chieftainship is hereditary and his authority absolute in re-
484 gard to shifting the camp site in search of the game upon which they live.
203 When the chief thinks that it is time to move he shouts out a speech in a
loud voice from his tent the evening before the move is to be made. All
the others listen to him with great attention, each from his own tent.
He tells them that a move must be made on the following day, he assigns
a time for rounding up [71] the horses, for striking the tents and for
starting out; no one answers him, and at the assigned hour all are ready
4/84 as he has ordered. The women travel along paths which lead to the
watering places where they are to stay; they are responsible for all the
baggage. The men, after the women have got under way, spread out
224 and take their places in the surrounding region in order to enclose the
guanacos and entangle them with the bolas as they attempt to break away.
The guanacos cannot be chased, for they dash away headlong at such
speed that no horse or dog can catch them. Once brought down by the
bolas the dogs assist the Indians to finish them off. The chief himself
assigns the position each Indian must take for the guanaco beat, for which
[622] in testimony of his overlordship, he is given part of the catch. The chief
never takes active part in the hunt and does nothing other than go from
4/84 stand to stand. The longest day's journeys are of four leagues. On ar-
riving at the assigned camping place the women put up the tents, col-
[313 lect firewood and have everything ready for the coming of the men. The
4/62] latter, when the sun sets, go to their tents, and never have I seen any of
them arrive at their tents after nightfall. If the march is to be continued
on the following day the chief harangues his people in the same manner